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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,225	08/24/2000	Peter W. Brown	32575	3218

116 7590 08/07/2003
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EXAMINER

ROY, SIKHA

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/645,225

Applicant(s)

BROWN ET AL.

Examiner

Sikha Roy

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 26-30 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 9-17, 19 is/are allowed.
- 6) ☒ Claim(s) 21-24, 26-30 and 32-38 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 18, 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The Amendment, filed on May 19, 2003 has been entered and overcomes the rejection of claims 1,2,9-11 and 12,13,15,16 under 35 U.S.C. § 102(b), and claims 3-6,17 and 14,19 under 35 U.S.C. § 103(a).

Cancellation of claims 25,31 has been entered.

Specification

The disclosure is objected to because of the following informalities:

The disclosure in page 5 lines 24-26, reciting 'optionally, the total number of layers will be less than 100,110,120,130,150, or 200' is ambiguous. It is not clear whether the total number of layers without suffering mechanical failure due to tensile stresses in the optical interference coating will be less than 100 or 200 and hence the maximum number of layers in the coating without being susceptible to tensile stress is not clearly ascertained.

Appropriate correction is required.

Claim Objections

Claim 8 recites exactly the same limitation as of claim 1 and hence must be cancelled.

Claims 7,18 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claims 7,18 and 20 recite the limitation comprising the number of layers greater than 55 while

depending on claim 1 which recites the number of layers greater than 60 and hence fail to further limit the claim1. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 21-24,26-30,32-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Referring to claims 21 and 27, the limitation comprising a ratio of the total thickness of all the layers of high refractive index material to the total thickness of all the layers of low refractive index material greater than 0.76, with total number of layers greater than 51, was not described in the specification. The specification discloses (page 5 lines 18-31) the mechanical stress decreases as the value of r (ratio of the total thickness of all the layers of high refractive index material to the total thickness of all the layers of low refractive index material) increases and for coatings having number of layers greater than 51 and maintaining mechanical integrity the value of r may be at least 0.9.

Claims 22-24, 26, 33-35 are rejected being dependent on base claim 21.

Claims 28-30,32,36-38 are rejected being dependent on base claim 27.

Allowable Subject Matter

Claims 1-6,9-17 and 12-19 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 12, the references of the Prior Art of record fails to teach or suggest optical interference coating having the combination of the limitations as set forth in claims 1 and 12, and specifically comprising the limitation of total number of layers being greater than 60 and the coating having sufficiently low tensile stress.

Regarding claims 2-6,9-17, claims 2-6,9-17 are allowable for the reasons given in claim 1 because of their dependency status from claim 1.

Claims 13-19 are allowable for the reasons given in claim 12 because of their dependency status from claim 12.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (703) 308-2826. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

S.R.
Sikha Roy
Patent Examiner
Art Unit 2879

Joseph Williams
Joseph Williams